



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/547,369	O	04/11/2000	Brian Mitchell Bass	RAL9-00-0032 4270 EXAMINER	
25299	7590	10/20/2003			
IBM CORI	PORATIO	N	VU, VIET DUY		
PO BOX 12 DEPT 9CC/		102	ART UNIT	PAPER NUMBER	
RESEARCH TRIANGLE PARK, NC 27709				2154	7
				DATE MAILED: 10/20/200	3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. Applicant(s) 09/547,369

Examiner

Bass et al

Viet Vu

Art Unit 2154



	The MAILING DATE of this communication appears	on the cover sheet with the corres					
	or Reply						
THE N	ORTENED STATUTORY PERIOD FOR REPLY IS SET MAILING DATE OF THIS COMMUNICATION.						
mailing - If the p - If NO p - Failure - Any re	ions of time may be available under the provisions of 37 CFR 1.136 (a). date of this communication. period for reply specified above is less than thirty (30) days, a reply within beriod for reply is specified above, the maximum statutory period will app to reply within the set or extended period for reply will, by statute, cause ply received by the Office later than three months after the mailing date patent term adjustment. See 37 CFR 1.704(b).	in the statutory minimum of thirty (30) days w by and will expire SIX (6) MONTHS from the r se the application to become ABANDONED (3	vill be considered timely. nailing date of this communication. 5 U.S.C. § 133).				
Status							
1) 💢	Responsive to communication(s) filed on Sep 17, 2	2003					
2a) 💢	This action is FINAL . 2b) ☐ This act	tion is non-final.					
3) 🗆	Since this application is in condition for allowance closed in accordance with the practice under $Ex\ pa$						
Disposi	tion of Claims						
4) 💢	Claim(s) <u>1-20</u>	is	/are pending in the application.				
4	a) Of the above, claim(s)	is	/are withdrawn from consideratio				
5) 🗌	Claim(s)		is/are allowed.				
6) 💢	Claim(s) 1-5, 7-12, 14-18, and 20	-	is/are rejected.				
7) 💢	Claim(s) 6, 13, and 19		is/are objected to.				
8) 🗆	Claims	are subject to res	triction and/or election requirement				
Applica	tion Papers						
9) 🗆	The specification is objected to by the Examiner.						
10)	The drawing(s) filed on is/ar	real accepted or by object	ted to by the Examiner.				
	Applicant may not request that any objection to the d	frawing(s) be held in abeyance. See	∍ 37 CFR 1.85(a).				
11)	The proposed drawing correction filed on	is: a) approved	disapproved by the Examine				
	If approved, corrected drawings are required in reply	to this Office action.					
12)	The oath or declaration is objected to by the Exam	iner.					
Priority under 35 U.S.C. §§ 119 and 120							
13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a) □ All b) □ Some* c) □ None of:							
	1. Certified copies of the priority documents have been received.						
•	2. \square Certified copies of the priority documents hav	ve been received in Application N	lo				
	 Copies of the certified copies of the priority d application from the International Bure 	au (PCT Rule 17.2(a)).	this National Stage				
*Se	ee the attached detailed Office action for a list of th						
14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).							
a) U The translation of the foreign language provisional application has been received.							
15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.							
Attachm	ent(s) tice of References Cited (PTO-892)	# □					
	tice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary (PTO-413) Paper	1				
	ormation Disclosure Statement(s) (PTO-1449) Paper No(s).	5) Notice of Informal Patent Application6) Other:	(P1O-152)				
		-, Color.					

DETAILED ACTION

Art Rejections:

- 1. The texts of 35 U.S.C. § 102(e) and 103(a) cited in the previous office action are hereby incorporated by reference.
- 2. The rejection of claims 1-4, 8-11 and 14-17 under 35 U.S.C. § 102(e) as being clearly anticipated by Chiang (6,445,709), paper #5, mailed 6/17/03, is hereby incorporated by reference.
- 3. The rejection of claims 5, 7, 12, 18 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Chiang (6,445,709) in view of Brice (4,825,206), paper #5, mailed 6/17/03, is hereby incorporated by reference.
- 4. Claims 8-11 are further rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiang, U.S. pat. No. 6,445,709 in view of Holt et al, U.S. pat. No. 5,790,545.

Chiang discloses a network multi-port switch comprising:

a) means for forwarding a packet received at a first port to a second port using a forwarding table (<u>see Chiang's fig. 9 and col</u> 12, lines 1-25),

b) means for learning a local source MAC address of the packet and updating the forwarding table with the source MAC address if the MAC address is not present in the table (see Chiang's col 12, lines 28-38).

Chiang does not teach providing routing table at each target port. Holt discloses a multi-port switch utilizing such distributed routing tables where each a target (egress) port comprising a processor and a memory configured for storing packet information for setting up a routing/connection table for routing the packet from the ingress port to the target port (see Holt's fig. 19 and col 14, line 50 - col 15, line 42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify <u>Chiang</u> with <u>Holt</u>'s teaching because it would have avoided having a large shared complex routing table.

5. Claim 12 is further rejected under 35 U.S.C. § 103(a) as being unpatentable over Chiang and Holt and further in view of Brice, Jr. et al, U.S. pat. No. 4,825,206.

Neither <u>Chiang</u> nor <u>Holt</u> teach reporting entries of a routing table (including MAC addresses) to a network operator. The use of

such network monitoring technique is well known in the art ($\underline{\text{see}}$).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify <u>Chiang</u> with <u>Brice</u>'s teaching because it would have enabled routing data in the network more effectively, i.e., avoiding failed links (<u>see Brice</u>'s col 10, <u>lines 38-43</u>).

Allowable Subject Matter:

6. Claims 6, 13 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Amendment:

7. Applicant's arguments filed on 9/17/03 with respect to rejected claims are not found persuasive.

Applicant alleges that <u>Chiang</u> does not teach learning MAC address <u>locally</u> to the target port.

The examiner submits that the alleged limitation is still not sufficient to define the invention over Chiang. In Chiang, the

routing table is provided within the multi-port switch and hence is considered to be local to the all ingress and target ports.

Per claims 8 and 9, even assuming that a routing table would be provided at each target port, such alleged limitation would be moot in view of new ground of rejection set forth above.

Conclusion:

8. Applicant's amendment necessitated the new grounds of rejection, e.g., claims 8-9. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Viet Vu whose telephone number is (703) 305-9597. The examiner can normally be reached on Monday through Friday from 7:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An, can be reached on (703) 305-9678.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

VIET D. VU PRIMARY EXAMINER

Cath)m

Art Unit 2154 10/9/03